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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/400,609	09/20/1999	HASSAN HAGIRAHIM	HAGIRAHIM5-4	3602

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EXAMINER

SWICKHAMER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/400,609

Applicant(s)

HAGIRAHIM ET AL.

Examiner

Christopher M Swickhamer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,15,17,24-25 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,15,17,24,25 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the Amendment filed 12/18/03. Claims 2, 5-14, 16, 18-23 and 26-29 have been cancelled. Claims 30-32 have been added. Claims 1, 15, 17, 24 and 25 have been amended. Claims 1, 3, 4, 15, 17, 24-25 and 30-32 are pending. Currently no claims are in condition for allowance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4, 15, 17, 24-25 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al (USP 5,623,605, hereafter Keshav) in view of the Draft ITU-T Recommendation H.323 (hereafter H.323).

- Referring to claim 1, Keshav discloses a system for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network (Fig. 4, col. 2, lns. 59-col. 3, lns. 23, col. 5, lns. 55-65, col. 6, lns. 40-58), the system comprising: a source gateway interconnected to the IP backbone network (Fig. 4, '100'), said source gateway operable to transmit an IP signaling message requesting an IP address of a proper destination gateway to a controller (connection manager) upon receipt of an ATM signaling message from

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an ATM end point (Fig. 4, col. 6, lns. 49-58, col. 7, lns. 24-41); and uses this information to setup a connection to send ATM cells across the IP network. Keshav does not expressly disclose receiving the IP address from the controller confirming the address of the proper destination gateway from the controller; transmit an address registration message to the controller to register the source gateway; exchange set-up messages with the proper destination gateway to transport IP encapsulated ATM cells associated with a call; and transmit an open logical channel request message to the controller to request the establishment of a dedicated channel between the source gateway and the destination gateway to transport IP encapsulated ATM cells. The H.323 standard discloses endpoints that can be gateways, and a gatekeeper (controller) for establishing connections. H.323 is designed to set up connections that require a certain quality of service to be established across networks that do not offer quality of service guarantees. H.323 can be applied to ATM (quality of service network) and IP (no quality of service guarantees, page ii, Fig. 1, pg. 2, pg. 5, 'Endpoint,' 'Gatekeeper,' 'Gateway'). H.323 discloses receiving the IP address from the controller confirming the address of the proper destination gateway from the controller (transmit a location request message, pg. 32, 7.2.3); transmit an address registration message to the controller to register the source gateway (pg. 31-32, 7.2.2); exchange set-up messages with the proper destination gateway to transport (IP encapsulated ATM cells) associated with a call (pg. 38, 8.1.2); and transmit an open logical channel request message to the controller to request the establishment of a dedicated channel between the source gateway and the destination gateway (to transport IP encapsulated ATM cells. pg. 34, pg. 50, all call signaling can be done exclusively through the gatekeeper). The system of Keshav could be modified to use the call setup and signaling of the H.323 protocol. At the time the invention was made, it

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would have been obvious to one of ordinary skill in the art to combine the system of Keshav, with H.323. One of ordinary skill in the art would have been motivated to do this since using H.323 allows quality of service data to be transported across networks without quality of service guarantees. This would also allow the system to be compatible with other networks using the H.323 recommendation.

- Referring to claim 3, Keshav discloses the system of claim 1 wherein the ATM signaling message is an ATM UNI signaling message (col. 6, lns. 5-11).

- Referring to claim 4, Keshav discloses the system of claim 1 wherein the IP signaling message follows the H.323 protocol (see claim 1).

- Referring to claim 15, Keshav discloses the method of claim 30 wherein the step of receiving the IP address from the controller is performed via a H.323 protocol message (see claim 30).

- Referring to claim 17, Keshav discloses the method of claim 30 wherein the signaling set-up messages use a Q.2931 signaling format (H.323 inherently uses Q.2931 signaling messages, see page 22, first paragraph of H.323).

- Referring to claims 24 and 31, Keshav discloses a system for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network (Fig. 4, col. 2, lns. 59-col. 3, lns. 23) comprising: a destination gateway interconnected to the IP backbone network (Fig. 4), and transmits IP encapsulated ATM messages. Keshav does not expressly disclose said destination gateway operable transmit an automatic retransmission request to a controller to register the destination gateway and to determine whether the

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destination gateway may receive IP encapsulated ATM cells associated with a call from a source gateway; receive a confirmation message from the controller confirming the destination gateway may receive the ATM cells; exchange set-up messages with a source gateway to transport IP encapsulated ATM cells over the IP backbone network; transmit an open logical channel request message to the controller to open a dedicated channel between the destination gateway and the source gateway; transmit an alert message to the source gateway to inform the source gateway that an ATM endpoint has been alerted about the call; and transmit a call proceeding message to the source gateway. H.323 discloses said destination gateway operable transmit an automatic retransmission request to a controller to register the destination gateway (pg. 31,32, 7.2.2, pg. 38, 8.1.2) and to determine whether the destination gateway may receive a call (IP encapsulated ATM cells) associated with a call from a source gateway; (pg. 38) receive a confirmation message from the controller confirming the destination gateway may receive the call (ATM cells); exchange set-up messages with a source gateway to transport the call (IP encapsulated ATM cells over the IP backbone network, pg. 38); transmit an open logical channel request message to the controller to open a dedicated channel between the destination gateway and the source gateway (pg. 34, pg. 50, all signaling can be done through the gatekeeper); transmit an alert message to the source gateway to inform the source gateway that an ATM endpoint has been alerted about the call; and transmit a call proceeding message to the source gateway (pg. 38). The system of Keshav could be modified to use the call setup and signaling of the H.323 protocol. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Keshav, with H.323. One of ordinary skill in the art would have been motivated to do this since using H.323 allows quality of service data to be

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transported across networks without quality of service guarantees. This would also allow the system to be compatible with other networks using the H.323 recommendation.

- Referring to claims 25 and 32, Keshav discloses a system for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network (Fig. 4), but does not expressly disclose a controller interconnected to the IP backbone network, said controller operable to transmit an IP address of a proper destination gateway to a source gateway using an IP signaling message; receive an address registration message from the source gateway to register the source gateway and an automatic retransmission message from the destination gateway to register the destination gateway; and transmit acknowledgements to the source and destination gateways to acknowledge the opening of a logical channel between the source and destination gateways in response to receiving one or more open logical channel request messages. H.323 discloses a gatekeeper (controller) interconnected to the IP backbone network, said gatekeeper (controller) operable to transmit an IP address of a proper destination gateway to a source gateway using an IP signaling message (transmit a location request/confirm message, pg. 32, 7.2.3); receive an address registration message from the source gateway to register the source gateway (pg. 31-32, 7.2.2) and an automatic retransmission message from the destination gateway to register the destination gateway (pg. 38); and transmit acknowledgements to the source and destination gateways to acknowledge the opening of a logical channel between the source and destination gateways in response to receiving one or more open logical channel request messages (pg. 34, pg. 50, all of the signaling can be done through the gatekeeper). The system of Keshav could be modified to use the call setup and signaling of the H.323 protocol. At

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the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Keshav, with H.323. One of ordinary skill in the art would have been motivated to do this since using H.323 allows quality of service data to be transported across networks without quality of service guarantees. This would also allow the system to be compatible with other networks using the H.323 recommendation.

- Referring to claim 30, Keshav discloses a method for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network (Fig. 4, col. 2, lns. 59-col. 3, lns. 30) comprising: transmitting an IP signaling message requesting an IP address of a proper destination gateway to a connection manager (controller) upon receipt of an ATM signaling message from an ATM end point (col. 6, lns. 49-59); receiving the IP address of the proper destination gateway from the connection manager (controller); and communicating across the IP network with IP encapsulated ATM cells (Col. 6, lns. 40-50). Keshav does not expressly disclose transmitting an address registration message to the controller to register a source gateway; exchanging set-up messages between the source gateway and the proper destination gateway to transport IP encapsulated ATM cells associated with a call; and transmitting an open logical channel request message to the controller to request the establishment of a dedicated channel between the source gateway and the destination gateway to transport encapsulated ATM cells. H.323 discloses transmitting an address registration message to the controller to register a source gateway (pg. 31-32); exchanging set-up messages between the source gateway and the proper destination gateway to transport (IP encapsulated ATM cells associated with) a call (pg. 38); and transmitting an open logical

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channel request message to the controller to request the establishment of a dedicated channel between the source gateway and the destination gateway to transport the call (encapsulated ATM cells, pg. 38 and 50). The system of Keshav could be modified to use the call setup and signaling of the H.323 protocol. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Keshav, with H.323. One of ordinary skill in the art would have been motivated to do this since using H.323 allows quality of service data to be transported across networks without quality of service guarantees. This would also allow the system to be compatible with other networks using the H.323 recommendation.

Response to Arguments

4. Applicant's arguments filed 12/18/03 have been fully considered but they are not persuasive.

- The remarks on pages 9-13 are directed toward the previous rejection. The Examiner will further elaborate on the new rejection, instead of discussing the less relevant previous rejection. The new rejection will combine the ideas from Keshav of encapsulating ATM cells in IP to transport the ATM cells across an IP network. Keshav discloses a controller (connection manager), which is responsible for setting up the connection across the IP network. The H.323 recommendation is used to setup multimedia connections or connections that require a certain quality of service across networks that do not give guarantees about quality of service. IP is one such network. ATM is also described as being transported by H.323. ATM requires that a certain level of quality of service. The rejection combines the encapsulation techniques to transmit ATM cells across IP networks with the call setup of H.323. H.323 has a controller

(gatekeeper) and gateways (Endpoints). The gatekeeper is used to setup a connection between the endpoints. H.323 also sets up logical channels between the endpoints. The figures of the claimed invention use very similar signaling sequences as the claimed invention (Fig. 3 of the instant application, and Fig. 14, pg. 38 of H.323). The Examiner believes that since H.323 can be used with ATM, and that quality of service is an issue with IP, that there is sufficient motivation to combine the two references.

Additionally, the thesis submitted by Phillip J. Tree on *Network Simulation of IP and ATM over IP using a Discrete Event Simulator* from July 1999 mailed with Paper No. 10 indicate that transmitting ATM data over an IP network and returning the data to an ATM network was known by others prior to the filing data of the present application (see Figure 1.1, page 5).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M Swickhamer whose telephone number is (703) 306.4820. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMS
March 2, 2004



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